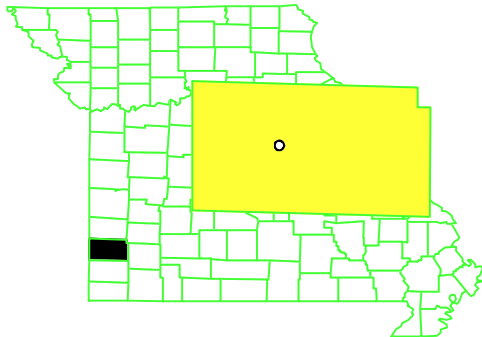


**ORONOGO-  
DUENWEG MINING  
BELT**  
**MISSOURI**  
**EPA ID# MOD980686281**

**EPA Region 7**  
**City: 2 miles northeast of Joplin**  
**County: Jasper County**  
**Other Names: Tar Creek-Jasper**  
**County**  
**Tri-State Mining Area**



## **SITE DESCRIPTION**

The Oronogo-Duenweg Mining Belt Site is an inactive lead and zinc mining and smelting area in the southwestern portion of Jasper County, Missouri. Operations began in the mid 1800s, and included hundreds of mines and 17 smelters. One smelter in the city of Joplin operated until the 1970s, which resulted in air emissions contaminating soil in a large area. About 7,000 acres are contaminated with over 10 million tons of surface mining wastes. These waste piles are uncovered and unstable. Leachate and runoff from the piles enter groundwater and surface streams. Sample results show that soil, groundwater, and surface water are contaminated with lead, zinc, and cadmium (hazardous substances) from the mining and smelting activities. Risks include ingestion of contaminated groundwater, soil, or mine wastes. About 2,700 residential homes located within the smelter and mining waste areas have yard soil above the established site action level for lead. A 1994 human health exposure study by the Missouri Department of Health (MDOH) shows that 14% of the children under seven years old have blood-lead concentrations exceeding the health-based standard of ten micrograms per deciliter.

### **Site Responsibility:**

This site is being addressed through Federal and potentially responsible parties' actions.

### **NPL LISTING HISTORY**

**Proposed Date:** 06/24/88

**Final Date:** 08/30/90

**Deleted Date:**

## THREATS AND CONTAMINANTS

The wastes from the mining, milling, and smelting of the ore has resulted in the significant contamination of groundwater, surface water, and surface soil with cadmium, lead and zinc. Approximately 500 homes on the eastern side of the site rely on private shallow groundwater wells. EPA has identified that at least 100 of these wells exceed action levels for lead and cadmium. At least 2,500 residential yards have been contaminated with lead above acceptable levels from smelting activities at the Eagle-Picher facility in northeast Joplin. Additionally, EPA has identified approximately 200 homes built on or near milling waste pile where the yard soil exceed acceptable levels of lead.

## CLEANUP APPROACH

### Response Action Status

**Initial Actions:** The EPA and the parties potentially responsible for site contamination are providing residences affected by contaminated groundwater with bottled water. In addition, six daycare centers and 300 residential yards have been cleaned of contaminated soil in the smelter areas.

**Mine and Mill Wastes:** Investigations into the nature and extent of contamination at the mining wastes were completed in 1995. EPA is currently conducting risk assessments for the site.

**Residential Yards:** Investigations of homes in the smelter area showed several thousand yards had high lead levels. EPA signed a Record of Decision on August 1, 1996 for remediation of residential yards. Remedial action of the yard soil was initiated in November 1996 and is anticipated to take five years to complete.

**Permanent Water Supply:** EPA signed a Record of Decision on July 29, 1998 to supply approximately 350 homes with public water supplies. Additionally, five homes will be supplied with point-of-use treatment units.

**Site Facts:** In 1991, the EPA signed an Administrative Order on Consent (AOC) with the potentially responsible parties to investigate the mining waste. A Unilateral Administrative Order was issued to the potentially responsible parties to provide bottled water to residents in 1994. A second Unilateral Administrative Order was issued to the PRPs in 1994 to conduct additional private water wells sampling and provide bottled water where exceedances of action levels were found. EPA signed an Administrative Order on Consent (AOC) with PRPs in 1995 to sample

residential yard soil and prioritize areas for a time critical removal. A Consent Decree is scheduled for completion in 1999 for the potentially responsible parties to install public water supply systems.

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## ENVIRONMENTAL PROGRESS



Providing bottled water to affected residences and removing contaminated residential yard soil has reduced the potential for exposure to contamination at the Oronogo-Duenweg Mining Belt site while final cleanup activities are being planned.

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## SITE REPOSITORY



Webb City Public Library, 101 S.  
Liberty, Webb City, Missouri 64870  
Joplin Public Library, 300 Main Street,  
Joplin, Missouri 64801  
Carl Junction City Hall, 105 N. Main  
Street, Carl Junction, Missouri 64834

Superfund Records Center  
901 N. 5th St.  
Kansas City, KS 66101  
Mail Stop SUPR  
(913)551-4038

## REGIONAL CONTACTS

**SITE MANAGER:**

**E-MAIL ADDRESS:**

Mark Doolan  
doolan.mark@epa.gov  
(913) 551-7169

**COMMUNITY INVOLVEMENT**

**COORDINATOR:**

**PHONE NUMBER:**

Hattie Thomas  
  
(913) 551-7762

**PUBLIC INFORMATION CENTER:**

**E-MAIL ADDRESS:**

**STATE CONTACT:**

**PHONE NUMBER:**

Dave Mosby  
(573) 751-1288

## MISCELLANEOUS INFORMATION

**STATE:**

MO  
0736

**CONGRESSIONAL DISTRICT:**

07

**EPA ORGANIZATION:**

SFD-SUPR/FFSE

## MODIFICATIONS